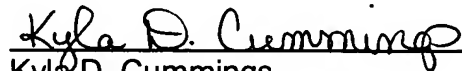


In accordance with 37 CFR § 1.97, this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

Applicants believe that no fee is due with this submission. However, if the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/WEAT/0524/WBP.

Respectfully submitted,



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PTO/SB/08a (08-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

of 4

Application Number	10/678,738
Filing Date	October 2, 2003
First Named Inventor	Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0524
Submission Date	June 9, 2004

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A1	US-6,345,669	Feb 12, 2002	Buyers et al.	
	A2	US-6,318,470	Nov 20, 2001	Chang et al.	
	A3	US-6,241,031	Jun 5, 2001	Beaufort et al.	
	A4	US-6,241,028	Jun 5, 2001	Bijleveld et al.	
	A5	US-6,179,058	Jan 30, 2001	Wittrisch	
	A6	US-6,173,787	Jan 16, 2001	Wittrisch	
	A7	US-5,833,002	Nov 10, 1998	Holcombe	
	A8	US-5,794,703	Aug 18, 1998	Newman et al.	
	A9	US-5,615,747	Apr 1, 1997	Vail, III	
	A10	US-5,547,314	Aug 20, 1996	Ames	
	A11	US-5,375,668	Dec 27, 1994	Hallundbaek	
	A12	US-5,343,950	Sep 6, 1994	Hale et al.	
	A13	US-5,343,951	Sep 6, 1994	Cowan et al.	
	A14	US-5,332,048	Jul 26, 1994	Underwood et al.	
	A15	US-5,209,304	May 11, 1993	Nice	
	A16	US-5,197,553	Mar 30, 1993	Leturno	
	A17	US-5,184,676	Feb 9, 1993	Graham et al.	
	A18	US-5,121,694	Jun 16, 1992	Zollinger	
	A19	US-5,040,619	Aug 20, 1991	Jordan et al.	
	A20	US-5,018,451	May 38, 1991	Hapstack	
	A21	US-4,962,822	Oct 16, 1990	Pascale	
	A22	US-4,960,173	Oct 2, 1990	Cognevich et al.	
	A23	US-4,883,125	Nov 28, 1989	Wilson et al.	
	A24	US-4,686,653	Aug 11, 1987	Staron et al.	

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Date Considered

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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First Named Inventor	Vail, III
Group Art Unit	3672
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Attorney Docket Number	WEAT/0524
Submission Date	June 9, 2004

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A25	US-4,651,837	Mar 24, 1987	Mayfield	
	A26	US-4,643,377	Feb 17, 1987	Christianson	
	A27	US-4,624,306	Nov 25, 1986	Traver et al.	
	A28	US-4,570,709	Feb 18, 1986	Wittrisch	
	A29	US-4,463,814	Aug 7, 1984	Horstmeyer et al.	
	A30	US-4,243,099	Jan 6, 1981	Rodgers, Jr.	
	A31	US-4,192,380	Mar 11, 1980	Smith	
	A32	US-4,085,808	Apr 25, 1978	Kling	
	A33	US-4,071,086	Jan 31, 1978	Bennett	
	A34	US-4,031,750	Jun 28, 1977	Youmans et al.	
	A35	US-3,969,950	Jul 20, 1976	Rau et al.	
	A36	US-3,890,905	Jun 24, 1975	Clavin	
	A37	US-3,888,319	Jun 10, 1975	Bourne, Jr., et al.	
	A38	US-3,827,512	Aug 6, 1974	Edmond	
	A39	US-3,603,411	Sep 7, 1971	Link	
	A40	US-3,552,508	Jan 5, 1971	Brown	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁸
		Number-Kind Code ² (if known)				
	B1	EP 0 564 500 B1	05.10.94	Hallundbaek		
	B2	WO 98/06927	19.02.98	Simpson		
	B3	WO 95/21987	17.08.95	Einar		
	B4	WO 93/18277	16.09.93	Hallundbaek		
	B5	WO 91/16520	31.10.91	Hallundbaek		

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Date Considered



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number	10/678,738
Filing Date	October 2, 2003
First Named Inventor	Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0524
Submission Date	June 9, 2004

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of 4

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	C1	Rotary Steerable Technology – Technology Gains Momentum, Oil & Gas Journal, 12/28/1998	
	C2	Directional Drilling, M. Mims, World Oil, May 1999, pp. 40-43	
	C3	Multilateral Classification System w/Example Applications", Alan MacKenzie & Cliff Hogg, World Oil, Jan. 1999, pp. 55-61	
	C4	Rotary Drilling, Open-Hole Fishing, Unit III, Lesson 2, Third Edition	
	C5	Rotary Drilling, Casing and Cementing, Unit II, Lesson 4, Second Edition	
	C6	Rotary Drilling, Drilling a Straight Hole, Unit II, Lesson 3, Second Edition	
	C7	Rotary Drilling, The Bit, Unit I, Lesson 2, Third Edition	
	C8	Rotary Drilling, Blowout Prevention, Unit III, Lesson 3, Third Edition	
	C9	Well Servicing and Workover, Artificial Lift Methods, Lesson 5, Petroleum Extension Service, The University of Texas at Austin	
	C10	Rotary Drilling, Drilling Mud, Unit II, Lesson 2, Third Edition	
	C11 ✓	Rotary Drilling, Subsea Blowout Preventers and Marine Riser Systems, Unit III, Lesson 4	
	C12	Well Servicing and Workover, Control of Formation Pressure, Lesson 9, Petroleum Extension Service, The University of Texas at Austin	
	C13	Well Servicing and Workover, Production Rig Equipment, Lesson 6, Petroleum Extension Service, The University of Texas at Austin	
	C14	Well Servicing and Workover, Petroleum Geology and Reservoirs, Lesson 2, Petroleum Extension Service, The University of Texas at Austin	
	C15	Well Servicing and Workover, Well Logging Methods, Lesson 3, Petroleum Extension Service, The University of Texas at Austin	
	C16	Well Servicing and Workover, Introduction to Oil Well Service and Workover, Lesson 1, Petroleum Extension Service, The University of Texas at Austin	
	C17	Well Servicing and Workover, Well Completion Methods, Lesson 4, Petroleum Extension Service, The University of Texas at Austin	
	C18	Rotary Drilling, Controlled Directional Drilling, Unit III, Lesson 1, Third Edition	
	C19	Well Servicing and Workover, Well Stimulation Treatments, Lesson 11, Petroleum Extension Service, The University of Texas at Austin	
	C20	Rotary Drilling, Making Hole, Unit II, Lesson 1, Second Edition	

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Date Considered

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Filing Date	October 2, 2003
First Named Inventor	Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0524
Submission Date	June 9, 2004

Sheet 4 of 4

NON PATENT LITERATURE DOCUMENTS

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	C21	Well Servicing and Workover, Well Cleanout and Repair Methods, Lesson 8, Petroleum Extension Service, The University of Texas at Austin	
	C22	Well Servicing and Workover, Well Servicing and Repair, Lesson 7, Petroleum Extension Service, The University of Texas at Austin	
	C23	Rotary Drilling, Circulating Systems, Unit I, Lesson 8, Third Edition	
	C24	Well Servicing and Workover, Well Service and Workover Profitability, Lesson 12, Petroleum Extension Service, The University of Texas at Austin	
	C25	Rotary Drilling, Testing and Completing, Unit II, Lesson 5, Second Edition	
	C26	Well Servicing and Workover, Fishing Tools and Techniques, Lesson 10, Petroleum Extension Service, The University of Texas at Austin	

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